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Promoting the Provision of Inclusive Primary Education for Children with Disabilities in Mashonaland West Province, Zimbabwe.

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Pre and post-intervention comparative analysis – School level data and multi-informant survey on knowledge, attitudes and practices (KAP) on disability and inclusive education

Introduction

This research was part of a larger programme of work being undertaken by Leonard Cheshire Disability (LCD) funded by UKAID – The Department for International Development and in collaboration with the Leonard Cheshire Disability Zimbabwe Trust.

The overall goal of this research study was to demonstrate the effectiveness of LCD's Inclusive Education (IE) approach to improving inclusion for girls and boys with disabilities in mainstream primary schools. The research was undertaken over the course of three years to measure the impact of LCDI's IE model by comparing outcomes of teacher training and parental sensitisation and peer support on teachers, families and children with disabilities, in case and control schools. The research compares results before and after interventions linked with the implementation of the IE programme.

This briefing paper is drawn from the Research Report 'Pre and Post-Intervention Comparative Analysis – School level data and Survey on Knowledge, Attitudes and Practices on Disability and Inclusive Education' (pdf).

The research presented here summarises the baseline data gathered on girls and boys with disabilities in the project schools, as well as the knowledge, attitudes and practices (KAP) of their parents (or caregivers), teachers and head teachers. This information is based on data collected in intervention and control schools in 2013 and again in 2015 both at the school level and through a KAP survey.

Methods

A longitudinal survey containing both quantitative and qualitative components was conducted based on a set of multi informant questionnaires that were developed in 2013 by the research centre at LCD based on standardised sets of questions used internationally in research of this kind. The same questionnaires were then re-administered in 2015 to enable comparison.

The multi informant survey measured the levels of knowledge, attitudes and practices (KAP) of 99 parents (or caregivers), 136 teachers and 52 head teachers for a total of 287 case and control informants before and after they had participated in a comprehensive IE training programme, delivered in the field by LCD . The research was complemented by focus group discussions and key informant interviews.

Information was disaggregated by district, urban/rural, type of school model/control, and type of provision (resource units, special classes and mainstream classes)

When possible the survey was implemented to the same participants. Nevertheless, in cases where it was not possible to collect the information from the same person, sampling by replacement was used. Some attrition was inevitable and this briefing is on the report that was drafted on a sample of 287 respondents. After replacement, the final sample in 2015 was 92.5% of the 2013 sample with a success rate of 68.5%. The largest numbers of observations lost were found in the parents sample with a deficit of 25 observations for 2015. Reasons for this high rate of attrition ranged from parents moving out of the area through to parents not being able to participate on the day of the interview.

Sample

The sample population described in the methodology was drawn from 30 model primary schools (those who received the IE intervention), 240 cluster schools (described below) as well as nine control schools from four districts (Kariba, Hurungwe, Mhondoro, Ngezi, and Sanyati) in Mashonaland West Province, Zimbabwe. This Province was initially chosen to roll out the IE project because of low enrolment rates of children with disabilities.

Each model school represents a cluster, influencing an average of 8 cluster schools, each less than 20km from the model school. Control schools were selected on the basis of their distance/proximity from both cluster and model schools. No intervention took place in

School level Data

In 2013, baseline data at the school level were gathered on enrolments of children with disabilities (CWD) in mainstream schools which captured information on number of children with disabilities in mainstream classes, resource units (mostly for children with hearing and visual impairments) and special classes (mostly for children with general learning difficulties). This same school level information was collected again in 2015.

Attitudinal KAP Survey

A questionnaire was developed based on standardised sets of questions used internationally in research of this kind. The survey was administered in 2013 prior to pre-intervention KAP of head teachers, teachers and parents/caregivers in the project areas and a control group prior to any intervention projects. The same questionnaire was administered in 2015, six months prior to the completion of the project.

Findings

The findings of this study examined the changes over time in knowledge, attitudes and practices among parents or caregivers, teachers and head teachers regarding children with disabilities in mainstream schools as well as highlighting the changes in school level demographics. The findings demonstrate the effectiveness of LCD's Inclusive Education approach for boys and girls in mainstream schools.

School Level Information

The results of the analysis of the school-based information (gathered by the project staff) revealed a general increase in the number of students enrolled in primary education in the three districts (*n.b.* the Hurungwe district was not included in this analysis). It is notable that the total number of children with disabilities had a larger and significant increase, with an increase in the percentages of children with disabilities in model schools..

The Mashonaland West Province was initially chosen to roll out the IE project because of low enrolment rates of children with disabilities. Throughout the course of the project these rates increased from 0.4%-2% to an average percentage of children with disabilities over the total student population of 4% in 2015, with a range from 0 to 17.4%. So, with regard to enrolment rates, the number of children with disabilities increased significantly, with an increase in the ratio of children with disabilities to total children in school. These positive results are likely to be a direct effect of the interventions implemented during the LCD IE project.

The results of the analysis revealed that for the three types of provisions (mainstream classes, special classes and resource units) offered in primary schools, the pupil/teacher ratio followed the national policy. On average, an increase in the number of teachers in model schools was observed between 2013 and 2015.

The data also revealed a general increase in the number of students enrolled in primary education. The total number of children with disabilities had a significant increase, with

typically an increase in the percentages of children with disabilities in school. The comparative analysis of the enrolment rates of children with disabilities in the three districts showed that over time there was a significant increase in the number of students with disabilities who attended model primary schools. An increase (however not significant) was observed on the average number of students with disabilities in special classes and resources units in model schools.

Students with disabilities in mainstream classes in model schools had a mix of impairments, with learning difficulties and mental challenges as most prevalent in 2015.

KAP Survey

The results of the KAP survey corroborate findings from the school level information. Several significant conclusions have been drawn and are included in the list below.

When changes over time were analysed, on average **model schools** showed an increase in the number of students with disabilities over the course of the project, as opposed to **control schools** where the number decreased. In addition to usual movement (e.g. parents transferring to another area), these results may be associated with students with disabilities moving from control to model schools as parents/caregivers got to know about the IE programme and seek to obtain the best opportunities for their children (there is some evidence from the project staff that this happened in some of the districts. It is also likely that some of the children were enrolled but did not actually attend the schools in the first place).

- **Overall increase in the number of children with learning disabilities in mainstream classes**

Both teachers and head teachers reported an important reduction in the average number of students with learning disabilities in mainstream classes and no important changes in the total number of students in special classes and resource units. The amelioration of teacher's ability to identify and differentiate disability types, and an increase in assessment services supports the hypothesis that the reduction in the number of students with learning disabilities does not represent a reduction of children with disabilities being included in mainstream school, but rather, might be associated with changes in how a child with a learning disability is assessed or identified.

- **Higher number of children attending schools in urban areas versus high number of children with disabilities in rural areas**

Despite more than 60% of the schools surveyed were in rural areas, head teachers in rural schools reported on average half the number of students compared to urban schools. This substantiates the fact that urban schools are more crowded, and children may need more support and resources to be equitably included in urban schools.

- **Teachers and children moving from special classes to mainstream classes**

There was movement of both teachers and children moving from special classes to mainstream classes. Even though it is

not possible to be certain about the causes of the relative mobility of teachers between provisions in model schools this finding is likely to be associated with a positive effect of the LCD IE strategies implemented during 2013-2015. Teachers have a degree of mobility and transfer in and out of school in particular from rural to urban areas. The movement of both teachers and children moving from special classes to mainstream classes may be a direct result of the LCD IE project which facilitated inclusion – however, it should be noted that the number of children in special classes is controlled by the schools and regulated by the Ministry of Education (MoE) (fixed at 19).

- **Increase in numbers of teachers trained in IE**

An increase in the number of head teachers and particularly teachers who reported training in IE was evident over time and it is a direct effect of the LCD IE project (teacher training was a key component). The levels of knowledge on IE also increased; with improvements in conceptual understanding of IE, as well as willingness to participate in further training. Project activities and interventions undertaken with the aim of increasing teachers and head teachers' knowledge, attitudes and practices toward inclusive education and educating children with disabilities had demonstrably positive effects.

- **Extra resources and more teaching materials available in model schools**

Information related to specialist teaching materials was analysed and data from 2013 revealed that 90% of head teachers mentioned that such materials were never available, a percentage that was reduced to 73% in 2015; since this reduction was only reported in model schools, it can be related to the IE programme, as such resources were provided as part of the programme. However, findings related to access to additional staff and teaching materials suggest that although positive and important improvements were made in the number and type of resources available in model schools, still there is a need to improve the quality and type of care provided to children with disabilities

- **Classroom assistants**

Classroom assistants (CAs) were provided to model schools as a key feature of the LCD IE model. Overall this strategy was a success. Results show a positive trend in retention. CAs were identified as being an additional resource for model schools – for CWDs, in helping them with activities of daily living; for teachers, in helping them with the extra needs of the class; and for parents, who as a consequence of not having to care for their CWDs were then able to go to work and/or do chores. Prior to the implementation of the IE project, parents and teachers reported that they were not aware that CWDs could be enrolled in local schools.

Notwithstanding, there was much debate about their sustainability as the MoE was reluctant to take on any additional ancillary staff (such as CAs). By the end of the project they were commonly called 'care givers' to remove their responsibility away from the MoE.

- **Positive changes in perceptions on physical barriers**

The teachers and head teachers of both model and control schools showed an increased understanding of how the

physical structure of the school as well as lack of assistive technology acts as a physical barrier to IE - however the change in model schools was more pronounced since LCD IE intervention made modifications (e.g. concrete pathways and ramps) in the architecture/structure of the school. Assistive devices were provided in model schools but not in control schools.

- **Main changes in attitudes and beliefs and concerns of head teachers, teachers and parents.**

Over all there was an increase in the percentage of teachers and head teacher who believed students with disabilities should be included in mainstream schools and in their willingness to make this possible. In addition, there was a reduction in the percentage of people in both groups who responded positively to questions regarding segregation. However, the results presented a mixed picture when aspects related to extra cost were included as a reason to segregate children with disabilities.

Parents recognised the positive changes that occurred over the course of the project with regard to support staff and the schools ability to teach and support their children. There was also an increase in the expectations that parents in model schools have related to children with disabilities attending further education, contrary to what was observed in control schools. All these positive changes may be attributed to the LCD IE project.

Overall, it is clear that the LCD IE project had a positive impact on the schools (including the teachers and head teachers), communities, parents and above all the children. Here and in the full report available online, we have outlined some of the specific mechanisms that led to these improvements, as well as some of the unintended consequences of the project. Obviously it is also difficult to make causal links, or detail which specific activities made the most difference; rather, the project demonstrates an overall improvement when all activities are undertaken. The next steps would be to scale up this pilot to more schools in different districts and observe if the positive benefits are transferable to other locations

Recommendations

This study recommends that:

Governance:

- There needs to be a clear policy and road map for implementation to ensure sustained and effective inclusive education. This should include adequate resources and support, as well as (additional) para-professional staff (including

speech and language therapists as well as classroom assistants to support children with disabilities).

- In the current political milieu in Zimbabwe, it is likely it will be non-state actors that deliver such services for a while to come – these actors need to work in close collaboration with the line ministries and local politicians, etc. to ensure that they are ready and willing to take over the running of such programmes if and when the time comes.
- There needs to be stronger collaboration between and across sectors (e.g. education, health, transport) at all levels.

Teachers and Schools

- Teachers need to be trained, supported, and adequately resourced to ensure effective, equitable inclusion and quality learning for children with disabilities. Ideally IE will be included in pre-service training, with regular continuous professional development days after qualification.
- More work needs to be undertaken around measuring learning outcomes.
- Teacher training needs to be more targeted – for example, needs to be more work around assessment of children with disabilities (especially those with learning difficulties).
- As teachers become more aware about inclusion they also become more aware of the gaps and need for specific resources and other requirements.
- The additional costs of disability need to be met (e.g. through allowances or other mechanisms).

Parents

- Parents need to have more advice and information about where to access resources and support for their children with disabilities. This includes targeted social assistance (for example, cash transfers) for parents of children with disabilities to ensure they can go to school.

Next Steps

- It is warranted that this pilot is scaled up to more schools in different districts in order to gauge if the positive benefits are transferable to other locations.
- The exclusion of children with most severe disabilities needs to be addressed.
- More research needs to be undertaken, for example to understand more about the identification, assessments, progression and experiences of children with learning difficulties

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